

After Final Office Action of November 2, 2005

### REMARKS

By this supplemental amendment, claims 1, 5, 9, 13, and 19 have been amended. Claims 1-19 are pending in the application. Applicants reserve the right to pursue the original claims and other claims in this and other applications.

On February 6, 2006, Examiner called Applicants' representative and suggested making additional amendments to the claims, which are incorporated herein.

Claims 1-3, 5-7, 9-11, 13-15, and 19 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nishimori et al. (US 6,900,620). This rejection is respectfully traversed.

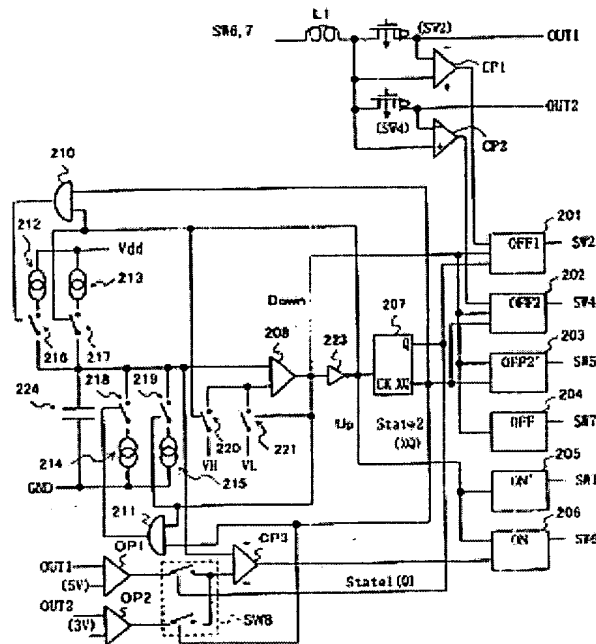
The filing date of Nishimori et al. is March 18, 2003. The priority date of this application is September 27, 2002, based on Japanese Patent Application No. 2002-282524. Therefore, Applicant respectfully submits that Nishimori et al. is not prior art to this application, and the rejection should be withdrawn.

Furthermore, claims 1, 5, 9, and 13, as amended, recite a power supply apparatus or method comprising, *inter alia*, a controller or controlling means "comprising a plurality of control circuits respectively coupled to control said plurality of power source circuits, said plurality of control circuits commonly receiving said common oscillator signal performing a time sharing control based on the oscillator signal to enable the plurality of power source circuits to receive power from the common direct current power source in different timings and to output respective voltages" (emphasis added). Nishimori et al. does not disclose these limitations. Nishimori et al. discloses only a single control circuit 16D, which comprises assorted circuitry, none of which is a plurality of control circuits that commonly receiving said common oscillator signal, as recited in claims 1, 5, 9, and 13. Nishimori et al. FIG. 20 (reproduced below). Since

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Nishimori et al. does not disclose all the limitations of claims 1, 5, 9, and 13, claims 1, 5, 9, and 13 are not anticipated by Nishimori et al.

Nishimori et al. FIG. 20

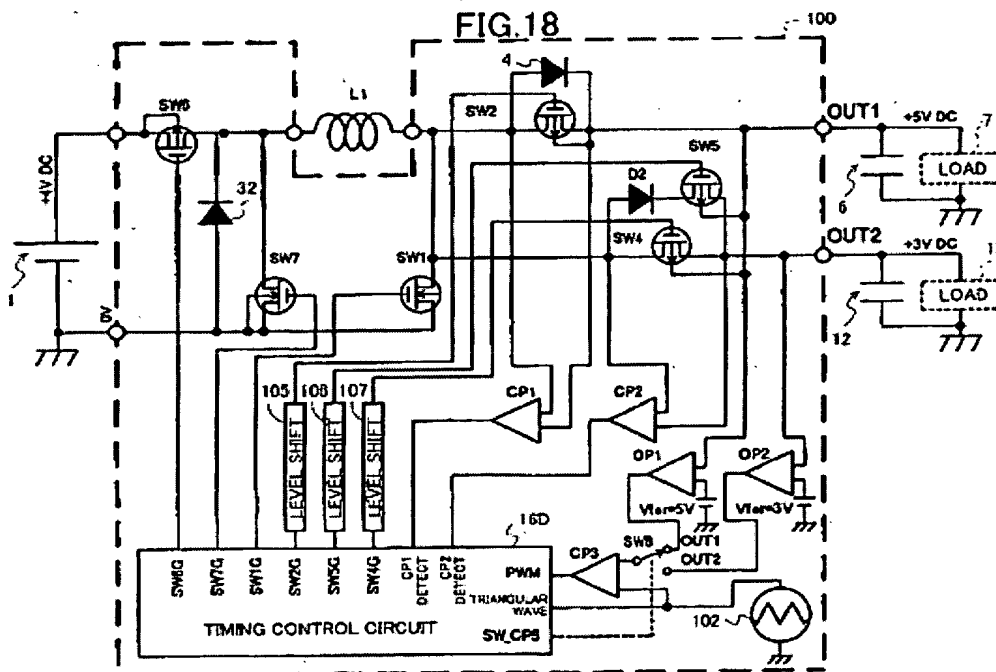


Claim 19 recites a power supply apparatus comprising, *inter alia*, "a plurality of independently controllable power source circuits with a common direct current power source, at least one of the plurality of power source circuits comprising: an electric storage circuit; a semiconductor switch ...; an error amplifier ...; and a controlling circuit." Nishimori et al. does not disclose this limitation. Nishimori et al. discloses switches SW2 and SW4 connected to outputs OUT1 and OUT2. Nishimori et al. FIG. 18 (reproduced below). There is no electric storage circuit, semiconductor switch, error amplifier, or controlling circuit in the power supply circuits. Furthermore, Nishimori et al. does not disclose a plurality of independently controllable power source circuits as recited in claim 19. Since Nishimori et al. does not disclose all the limitations of claim 19, claim 19 is not anticipated by Nishimori et al.

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Furthermore, claims 1, 9, and 13 recite, *inter alia*, "a plurality of power source circuits..., wherein said plurality of power source circuits comprises at least two different types of converter circuits" (emphasis added). Claim 5 recites, *inter alia*, "a plurality of power generating means..., wherein said plurality of power generating means comprises at least two different types of converting means" (emphasis added). Nishimori et al. does not disclose these limitations. Nishimori et al. discloses only "SW2 and SW4 with a common DC power source," as described in the Office Action at paragraph 2. See also Nishimori et al. FIG. 18 (reproduced below). There is no plurality of power source circuits or power generating means comprising at least two different types of converter circuits as recited in claims 1, 9, 13, and 19, or at least two different types of converting means as recited in claim 5.

Nishimori et al. FIG. 18



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Claims 2-3 depend from claim 1 and are patentable at least for the reasons mentioned above. Claims 6-7 depend from claim 6 and are patentable at least for the reasons mentioned above. Claims 10-11 depend from claim 9 and are patentable at least for the reasons mentioned above. Claims 14-15 depend from claim 13 and are patentable at least for the reasons mentioned above. Applicants respectfully request that the 35 U.S.C. § 102(e) rejection of claims 1-3, 5-7, 9-11, 13-15, and 19 be withdrawn.

Claims 1-3, 5-7, 9-11, 13-15, and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Aas et al. (US 6,265,855). This rejection is respectfully traversed.

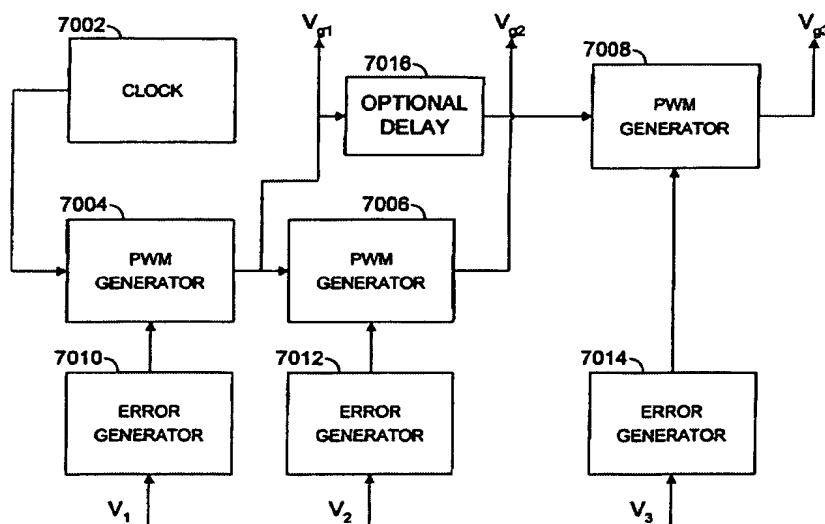
Claims 1, 5, 9, and 13, as amended, recite a power supply apparatus or method comprising, *inter alia*, a controller or controlling means “comprising a plurality of control circuits respectively coupled to control said plurality of power source circuits, said plurality of control circuits commonly receiving said common oscillator signal performing a time sharing control based on the oscillator signal to enable the plurality of power source circuits to receive power from the common direct current power source in different timings and to output respective voltages” (emphasis added). Aas et al. does not disclose this limitation. Aas et al. discloses in FIG. 7 that PWM generators 7006 and 7008 operate based on the output from PWM generator 7004, and not on clock signal 7002. Aas et al. FIG 7 (reproduced below). There is no controller comprising a plurality of control circuits commonly receiving said common oscillator signal as recited in claims 1, 5, 9, and 13.

Furthermore, claims 1, 9, and 13 recite, *inter alia*, “a plurality of power source circuits..., wherein said plurality of power source circuits comprises at least two different types of converter circuits” (emphasis added). Claim 5 recites, *inter alia*, “a plurality of power generating means..., wherein said plurality of power generating means comprises at least two different types of converting means” (emphasis added).

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Aas et al. does not disclose these limitations. Aas et al. discloses only "S1/L1+, S2/L2+, and S3/L3+, with a common DC power (V1) source," as described in the Office Action at paragraph 3. Although Aas et al. recites at Col. 3. ln. 50-56 that "the basic design of these supplies is a buck regulator type design.... However, ... the invention could also be used with boost type, or buck-boost type, or a combination of switching regulator types," this disclosure is at best ambiguous, in that Aas et al. could be referring to each of the regulators being a combination of regulator types. It is well settled that an ambiguous disclosure is not an anticipating disclosure. *Philips Electronic and Pharmaceutical Industries Corp. v. Thermal and Electronics Industries, Inc.*, 450 F.2d 1164, 1169 (3d Cir. 1971) citing *Cummins Engine Co. v. General Motors Corp.*, 299 F.Supp. 59, 91 (D.Md. 1969); *Monsanto Company v. Dawson Chemical Company*, 312 F.Supp. 452, 458 (S.D.Tex. 1970). Accordingly, Aas et al. does not disclose "a plurality of power source circuits compris[ing] at least two different types of converter circuits" as recited in claims 1, 9, 13, and 19, or at least two different types of converting means as recited in claim 5.

Aas et al. FIG. 7



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Since Aas et al. does not disclose all the limitations of claims 1, 5, 9, and 13, claims 1, 5, 9, and 13 are not anticipated by Aas et al. Claims 2-3 depend from claim 1 and are patentable at least for the reasons mentioned above. Claims 6-7 depend from claim 6 and are patentable at least for the reasons mentioned above. Claims 10-11 depend from claim 9 and are patentable at least for the reasons mentioned above. Claims 14-15 depend from claim 13 and are patentable at least for the reasons mentioned above. Applicants respectfully request that the 35 U.S.C. § 102(b) rejection of claims 1-3, 5-7, 9-11, 13-15, and 19 be withdrawn.

Claim 19 recites a power supply apparatus comprising, *inter alia*, “a plurality of independently controllable power source circuits with a common direct current power source, at least one of the plurality of power source circuits comprising: an electric storage circuit; a semiconductor switch ...; an error amplifier ...; and a controlling circuit.” Aas et al. does not disclose this limitation. Aas et al. discloses “first regulator 1010 is shown comprising switching transistor S1, 1012, diode 1014, inductor L1, 105, and filter capacitor C1 1016.” Col. 2, ln. 63-65. There is no electric storage circuit, semiconductor switch, error amplifier, or controlling circuit in the power supply circuits. Since Aas et al. does not disclose all the limitations of claim 19, claim 19 is not anticipated by Aas et al.

Claims 4, 8, 12, and 16-18 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Claims 4, 8, 12, and 16-18 depend, respectively, directly, or indirectly from independent claims 1, 5, 9, and 13, and are allowable for at least the reasons set forth above.

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In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Dated: March 14, 2006

Respectfully submitted,

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